

PDR RID Report

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Originator Phil Pease

Phone No 301-286-4418

Organization GSFC DAAC

E Mail Address pease@daac.gsfc.nasa.gov

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Priority 2

Section Ingest Subsystem

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Figure Table

Category Name Design-Ingest

Actionee HAIS

Sub Category

Subject Ingest Working Storage Sizing

Description of Problem or Suggestion:

The ingest working storage is indicated to be for Level 0 high availability needs. Other uses seem likely (e.g., metadata checking indicates some possible problem and requires human decision to proceed or data arrives at a rate much faster than the ingest process can keep up) in these cases data needs to be kept in working storage.

Originator's Recommendation

Ingest data working storage should be sized to handle these problem conditions (e.g., size to keep 24 hours worth of ingest).

GSFC Response by:

GSFC Response Date

HAIS Response by: Eisenstein

HAIS Schedule 5/22/95

HAIS R. E. P. Roycraft

HAIS Response Date 6/30/95

The wording of the ingest working storage sizing description in the presentation does not adequately reflect the sizing rationale as described in the supporting PDR documentation (ECS 305-CD-002-002, section 8.3.1.2). For all data to be ingested through the Ingest Subsystem, working storage is sized to hold a minimum of two days worth of the average daily ingest rate. That size was set up to accommodate the delivery of more than one day's worth of data within a day (e.g., to support recovery of backup data after a network connection is reestablished). During nominal operations that extra space is more than sufficient to support retention of data after a metadata problem or other detected fault condition.

In addition, the system is designed to begin transferring the ingested data to the L0 archive (rolling store), as well as its eventual destination (either the Processing or Data Server Subsystems) as quickly as possible, yielding an even larger effective daily data handling capability. Dynamic resource allocation within the Ingest Subsystem also allows the allocation of resources to change based on the priority of all ingest tasks, allowing a greater percentage of available working storage resources to be dedicated to a particular task. In the event that operator intervention is required to solve a problem (e.g., a metadata checking abnormality), there is still sufficient working storage available to support ongoing operations.

ECS will further refine the Ingest staging disk analysis prior to CDR and capture that analysis in the CDR version of DID #305.

Status Closed

Date Closed 7/17/95

Sponsor Kobler

Attachment if any
